MILLER et al. -- Appln. No. <u>09/682,247</u>

along the upper portion of said plume thereof towards said outflow opening intersect said inflow and are thereby drawn into said trap by said inflow.

- 43. (Previously Added) A device according to claim 42, wherein said outflow opening faces downwardly and directs said outflow downwardly.
- 44. (Previously Added) A device according to claim 43, further comprising a tubular member having an open lower end providing said outflow opening.
- 45. (Previously Added) A device according to claim 44, further comprising a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening,

said tubular member having an open upper end in communication with said inlet opening to enable said inflow to flow through said tubular member and out said open lower end as part of said outflow.

46. (Previously Added) A device according to claim 45, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall,

said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet as an annular downwardly facing opening between said edge portion and said tubular member.

- 47. (Previously Added) A device according to claim 45, wherein said airflow generator comprises a fan.
- 48. (Previously Added) A device according to claim 47, wherein said fan is a single fan.
- 49. (Previously Added) A device according to claim 48, wherein said fan is positioned within said tubular member.

- 50. (Previously Added) A device according to claim 49, wherein said insect trap is positioned within said tubular member.
- 51. (Previously Added) A device according to claim 50, wherein said insect trap is a flexible mesh structure.
- 52. (Previously Added) A device according to claim 51, wherein said mesh structure is positioned above said fan.
- 53. (Previously Added) A device according to claim 51, wherein said insect attractant is carbon dioxide.
- 54. (Previously Added) A device according to claim 53, wherein said carbon dioxide is supplied to said tubular member at a point higher than said fan.
- 55. (Previously Added) A device according to claim 54, further comprising a tank containing said carbon dioxide and a hose supplying said carbon dioxide to said tubular member from said tank.
- 56. (Previously Added) A device according to claim 55, wherein said hose supplies said carbon dioxide directly to said tubular member.
- 57. (Previously Added) A device according to claim 56, wherein said tubular member has a port formed therethrough and said hose is connected to said port.
- 58. (Previously Added) A device according to claim 42, wherein said airflow generator comprises a fan.
- 59. (Previously Added) A device according to claim 58, wherein said airflow generator is a single fan.
- 60. (Previously Added) A device according to claim 58, wherein said airflow generator comprises multiple fans.

- 61. (Previously Added) A device according to claim 60, wherein said multiple fans is two fans, one of said fans generating said inflow, the other of said fans generating said outflow.
- 62. (Previously Added) A device according to claim 42, wherein said insect trap is a flexible mesh structure.
- 63. (Previously Added) A device according to claim 42, wherein said insect attractant is carbon dioxide.
- 64. (Previously Added) A device according to claim 63, further comprising a tank containing said carbon dioxide.
 - 65. (Cancelled).
 - 66. (Cancelled).
- 67. (Previously Amended) A method for capturing flying insects using a device for capturing flying insects, said device comprising an insect trap; said method comprising:

generating an outflow, comprising an insect attractant, flowing outwardly from said device to create a plume flowing downwardly and spreading radially from said device; and

generating an inflow flowing substantially counter to and immediately adjacent an upper portion of said plume and then into said trap such that insects attracted to said outflow and flying along the upper portion of said plume thereof towards said device intersect said inflow and are thereby drawn into said trap by said inflow.

68. (Previously Added) A method according to claim 67, wherein said device includes an airflow generator, an outflow opening communicated with said airflow generator, and an inflow opening communicated with said insect trap and said airflow generator,

said generating said inflow and said generating said outflow being performed by said airflow generator.

- 69. (Previously Added) A method according to claim 68, wherein said outflow opening faces downwardly and wherein said outflow opening directs said outflow downwardly to create said plume.
- 70. (Previously Added) A method according to claim 69, wherein said device further comprises a tubular member having an open lower end providing said outflow opening; said generating said outflow including directing said outflow through said open lower end.
- 71. (Previously Added) A method according to claim 70, wherein said device further comprises a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening, said tubular member having an open upper end in communication with said inlet opening;

said generating said outflow and said generating said inflow being performed by drawing said inflow in through said inlet opening into said open upper end and then out through said open lower end so that said inflow is part of said outflow.

72. (Previously Amended) A method according to claim 71, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall, said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet opening as an annular downwardly facing opening between said edge portion and said tubular member.

said generating said inflow including drawing said inflow upwardly from said inlet opening between said tubular wall and said tubular member and then into said open upper end of said tubular member.

73. (Previously Amended) A method according to claim 71, wherein said airflow generator comprises a single fan and wherein both generating said inflow and generating said outflow is performed by operating said fan.

MILLER et al. - Appln. No. <u>09/682,247</u>

- 74. (Previously Amended) A method according to claim 73, wherein said insect attractant is carbon dioxide and said method further comprises supplying said carbon dioxide to said tubular member.
- 75. (Previously Added) A method according to claim 74, wherein said fan is positioned within said tubular member and wherein said carbon dioxide is supplied at a point higher than said fan.
- 76. (Previously Added) A method according to claim 75, wherein said carbon dioxide is supplied directly to said tubular member.
- 77. (Previously Added) A method according to claim 74, wherein said carbon dioxide is supplied directly to said tubular member.
- 78. (Previously Added) A device according to claim 44, wherein said insect attractant is carbon dioxide.
- 79. (Previously Added) A device according to claim 78, further comprising a tank containing said carbon dioxide.
- 80. (Previously Added) A device according to claim 79, further comprising a hose supplying said carbon dioxide from said tank to said tubular member.
- 81. (Previously Added) A device according to claim 80 wherein said hose supplies said carbon dioxide directly to said tubular member.
- 82. (Previously Added) A method for capturing flying insects using a device for capturing flying insects, said device comprising an insect trap; said method comprising:

generating an outflow, comprising an insect attractant, flowing outwardly from said device to create a plume flowing downwardly and away from said device; and

generating an inflow flowing substantially counter to an upper portion of said plume and then into said trap, the inflow drawing insects attracted to said outflow and flying along the upper portion of said plume thereof towards said device into said trap. 83. (Previously Added) A method according to claim 82, wherein said device includes an airflow generator, an outflow opening communicated with said airflow generator, and an inflow opening communicated with said insect trap and said airflow generator,

said generating said inflow and said generating said outflow being performed by said airflow generator.

- 84. (Previously Added) A method according to claim 83, wherein said outflow opening faces downwardly and wherein said outflow opening directs said outflow downwardly to create said plume.
- 85. (Previously Added) A method according to claim 84, wherein said device further comprises a tubular member having an open lower end providing said outflow opening; said generating said outflow including directing said outflow through said open lower end.
- 86. (Previously Added) A method according to claim 85, wherein said device further comprises a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening, said tubular member having an open upper end in communication with said inlet opening;

said generating said outflow and said generating said inflow being performed by drawing said inflow in through said inlet opening into said open upper end and then out through said open lower end so that said inflow is part of said outflow.

87. (Previously Added) A method according to claim 86, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall, said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet opening as an annular downwardly facing opening between said edge portion and said tubular member,

said generating said inflow including drawing said inflow upwardly from said inlet opening between said tubular wall and said tubular member and then into said open upper end of said tubular member.

- 88. (Previously Added) A method according to claim 86, wherein said airflow generator comprises a single fan and wherein both generating said inflow and generating said outflow is performed by operating said fan.
- 89. (Previously Added) A method according to claim 88, wherein said insect attractant is carbon dioxide and said method further comprises supplying said carbon dioxide to said tubular member.
- 90. (Previously Added) A method according to claim 89, wherein said fan is positioned within said tubular member and wherein said carbon dioxide is supplied at a point higher than said fan.
- 91. (Previously Added) A method according to claim 90, wherein said carbon dioxide is supplied directly to said tubular member.
- 92. (Previously Added) A method according to claim 89, wherein said carbon dioxide is supplied directly to said tubular member.
- 93. (Previously Added) A device for capturing flying insects, said device comprising:

an insect trap;

an airflow generator generating (a) an outflow comprising an insect attractant and (b) an inflow;

an outflow opening communicated to said airflow generator, said outflow opening enabling said outflow to flow outwardly from said device to create a plume flowing downwardly and away from said device; and

an inlet opening communicated to said airflow generator and said insect trap and positioned vertically higher than said outlet opening, said airflow generator drawing said inflow substantially counter to an upper portion of said plume and then into said trap via said

inlet opening so as to draw insects attracted to said outflow and flying along the upper portion of said plume thereof towards said outflow opening into said trap.

- 94. (Previously Added) A device according to claim 93, wherein said outflow opening faces downwardly and directs said outflow downwardly.
- 95. (Previously Added) A device according to claim 94, further comprising a tubular member having an open lower end providing said outflow opening.
- 96. (Previously Added) A device according to claim 95, further comprising a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening,

said tubular member having an open upper end in communication with said inlet opening to enable said inflow to flow through said tubular member and out said open lower end as part of said outflow.

97. (Previously Added) A device according to claim 96, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall,

said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet as an annular downwardly facing opening between said edge portion and said tubular member.

- 98. (Previously Added) A device according to claim 96, wherein said airflow generator comprises a fan.
- 99. (Previously Added) A device according to claim 98, wherein said fan is a single fan.
- 100. (Previously Added) A device according to claim 99, wherein said fan is positioned within said tubular member.

- 101. (Previously Added) A device according to claim 100, wherein said insect trap is positioned within said tubular member.
- 102. (Previously Added) A device according to claim 101, wherein said insect trap is a flexible mesh structure.
- 103. (Previously Added) A device according to claim 102, wherein said mesh structure is positioned above said fan.
- 104. (Previously Added) A device according to claim 102, wherein said insect attractant is carbon dioxide.
- 105. (Previously Added) A device according to claim 104, wherein said carbon dioxide is supplied to said tubular member at a point higher than said fan.
- 106. (Previously Added) A device according to claim 105, further comprising a tank containing said carbon dioxide and a hose supplying said carbon dioxide to said tubular member from said tank.
- 107. (Previously Added) A device according to claim 106, wherein said hose supplies said carbon dioxide directly to said tubular member.
- 108. (Previously Added) A device according to claim 107, wherein said tubular member has a port formed therethrough and said hose is connected to said port.
- 109. (Previously Added) A device according to claim 93, wherein said airflow generator comprises a fan.
- 110. (Previously Added) A device according to claim 109, wherein said airflow generator is a single fan.
- 111. (Previously Added) A device according to claim 109, wherein said airflow generator comprises multiple fans.

- 112. (Previously Added) A device according to claim 111, wherein said multiple fans is two fans, one of said fans generating said inflow, the other of said fans generating said outflow.
- 113. (Previously Added) A device according to claim 93, wherein said insect trap is a flexible mesh structure.
- 114. (Previously Added) A device according to claim 93, wherein said insect attractant is carbon dioxide.
- 115. (Previously Added) A device according to claim 114, further comprising a tank containing said carbon dioxide.
- 116. (Previously Added) A device according to claim 95, wherein said insect attractant is carbon dioxide.
- 117. (Previously Added) A device according to claim 116, further comprising a tank containing said carbon dioxide.
- 118. (Previously Added) A device according to claim 117, further comprising a hose supplying said carbon dioxide from said tank to said tubular member.
- 119. (Previously Added) A device according to claim 118, wherein said hose supplies said carbon dioxide directly to said tubular member.